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ANCIENT ORIENTATION UNVEILED

II¹

ETRURIA AND ROME

IT WILL save repetition if Etruria and Rome are treated together. Rome adopted or experimented with all the Etruscan forms of divination and ceremonial that contained the element of orientation, as well as continued the practises she inherited from her Latin and Sabine brothers. She was also familiar with the practises of the Marsi, the Umbri, and other Italic tribes.

The material can be classified under two main heads: divination by birds, which is Italic and Roman; and divination by thunder and lightning, which is Etruscan.² Both these classes must be studied in connection with something we have not yet encountered, a consecrated and determined area called a *templum*, within which the phenomena are noted. It is in this matter of the *templum* that Etruria and Rome made the most important contribution to the science of Orientation.

Before discussing the *templum* and its orientation, it may be said at once that there is no exception throughout Italy to the lucky left and to southern heavenly orientation.

The earliest first-hand record is in the fragments of Ennius (c. 200 B.C.), especially in those that describe the founding of Rome by Romulus, under the favorable auspices of the twelve left-hand birds. Ennius distinctly states that Romulus sought the *laevum genus altivolantum*. Cicero, himself an augur, points

¹ For Part I, see A. J. A. XXI, 1917, pp. 55-76.

² Divination by the liver of the victim, which is also Etruscan, is not considered here because, while orientation and the lucky left apparently entered into its ritual, they did so in a way so subordinate to other phenomena as to make it unnecessary to discuss them here, for lack of data. It can be said, however, that here also the left side was lucky, and that the left hand was used in handling the liver; that there were sixteen divisions in the left lobe, corresponding to the Etruscan divisions of the heaven for divination; that, in a way, the liver was a reflection of the heavens.

out the contrast between the Roman theory of the lucky left and the Greek theory of the lucky right: "to us left-hand things seem the best, but to Greeks and barbarians right-hand things" (*Div.* II, 39, 83). Ovid, in the *Fasti* (IV, 833), speaks of favorable left-hand thunders at the founding of Rome. Plutarch discusses the lucky left-hand birds in his Roman Questions (78). Virgil in the *Georgics* (IV, 7) refers to the *laeva prospera*. The foremost Roman antiquarians, Varro and Festus, furnish abundant material on the lucky left. So do the Plinies,¹ Lucan,² Dionysius, Plautus³, Servius, etc. These data will be given in detail later. The very term "sinister" meant the opposite to the Romans: it stood for "lucky."

The unwillingness of the modern mind to grasp this connection of luck with the left has tinged a number of the discussions of this question and led to such palpable absurdities as the denying that when the Romans said "left" they really meant the left side.

Among those who have written on this subject the principal are K. O. Müller,⁴ Valetton,⁵ Nissen⁶ and Regell.⁷ Of these Regell has most closely approximated to the truth.

The first question is a definition of the *templum*. It was of

¹ The elder Pliny will be quoted later. The younger, in his *Paneg.* 5, 3, says: *ceteros principes aut largus cruor hostiarum aut sinister volatus avium consulenti-bus nuntiavit.*

² *Phars.* I, 596: *et doctus volucris augur servare sinistras.*

³ *Pseud.* 2, 4, 72: *avi sinistra, auspicio liquido.*

⁴ Müller, *Die Etrusker*, ed. Deecke, II, pp. 114-195.

⁵ I. M. I. Valetton, *De modis auspicandi Romanorum*, with abundant quotations, in *Mnemosyne*, XVII, 275-325, 418-452; XVIII, 208-263, 406-456. Out of Varro's three classes Valetton elaborated a theory of five classes of *templa*: (1) Seat of the gods, in the north, the gods facing south; (2) terrestrial auspicated *templum*; (3) infernal or subterranean regions; (4) expanse of heaven or celestial *templum*; (5) aerial *templum*, inaugurated on earth. He opposes Regell, who finds only three temples in Varro, and asserts that Regell confuses (1) and (4) as well as (2) and (5). But Regell in quite correct and Valetton's theory has been received with but little favor. This applies also to his assertion that the terms *right* and *left* in orientation refer to the gods, who live in the north and whose left would be the east, and have nothing to do with the direction of the augur or magistrate.

⁶ H. Nissen, *Das Templum* (1869) and *Orientation* (1906). The latter is an enlargement of the former work. The main emphasis is on the orientation of temple buildings and cities, with elaborate astronomical calculations, and it deals only in a secondary way with the other parts of the question.

⁷ P. Regell, *Fragmenta auguralia* (Dissert. Hirschberg, 1882); *De augurum publicorum libris*; and, especially, *Die Schautempla der Augurn* in *Jb. Phil. Päd.* 1881, 593-637.

three kinds, according to Varro's classic and authoritative definition. He says: "We speak of a *templum* as of three kinds: as according to nature, as established by auspices, as according to analogy. That is, as it is constituted by nature in the heavens, by auspices on the earth, and by analogy [*i.e.* to the heavenly] under the earth."¹

Heavenly Templum.—The heavenly *templum* is the entire expanse of heaven, circular in outline.² It was divided for purposes of divination into four sections by the Romans, and further subdivided into sixteen sections by the Etruscans. The signs observed in the heavens possessed different meanings according to the section in which each appeared. These divisions were made by the diviner with his sacred curved wand or *lituus*. He faced southward. He waved his wand from south to north across the heaven, making a straight line which was called the *cardo*, from its corresponding to the axis or pole on which the universe revolved. This divided the world, both earth and heaven, into two halves, an eastern and a western. It was bisected at right angles by another line, running from due east to west. This line was called *decumanus*.³ Varro says that these four sections of the *templum* are called "the left part on the east, the right part on the west, the front part on the south and the rear part on the north."⁴ Another passage of Varro is quoted by Festus, to explain why the left-hand birds in augury are considered lucky. He says that left auspices are lucky because the eastern side of the world is on one's left hand in the ceremonies of consulting the gods. "When the auspices are taken from the seat of the gods [the augural seat] facing the south, the fact that the orient is on the left and the occident on the right is the probable reason why left-hand auspices are considered superior to right-hand auspices."⁵

¹ L. L. VII, 6-13: *Templum tribus modis dicitur: ab natura, ab auspicando, a similitudine; ab natura in caelo, ab auspiciis in terra, a similitudine sub terra.*

² Varro, *ibid.*: *quaquia intuiti erant oculi, a tuendo primo templum dictum quocirca caelum qua attuimur dictum templum.*

³ The term *decimanus*, or *decumanus*, does not apply with certainty to this transverse heavenly line. It is likely to have been connected with land surveying.

⁴ *Ibid.*: "*Eius templi partes quattuor dicuntur, sinistra ab oriente, dextra ab occasu, antica ad meridiem, postica ad septentrionem.*"

⁵ Festus, s. v. *Sinistrae* (p. 339): *Sinistrae aves sinistrumque est sinistimum auspicium id quod sinat fieri.* Varro l.V *Epistolicarum quaestionum* ait: 'a

Festus not only here quotes Varro for the lucky left and southern orientation but gives two other early authorities for the same facts: Cincius, and Sennius Capito. He also states on his own authority that "the part of the heaven to the south is called the front and the northern part the back and these are subdivided into east and west." The first part of this sentence is taken, word for word, from Cicero.¹ In Cicero we find a number of corroborations, which is natural, as he was an augur and wrote on divination.² A notable passage is that in which he describes how the boy Attus Navius, who afterward became a noted diviner, used the *templum* ceremonial to find a huge bunch of grapes as a gift to Jupiter. He faced south and bisected the sky with the *cardo* and *decumanus* lines, and then consulted the auspicious and inauspicious bird signs.³ But most important of all is his

deorum sede cum in meridiem spectes ad sinistra sunt partes mundi exorientes, ad dexteram occidentes; factum arbitror et sinistra meliora auspicia, quam dextera esse existimentur.⁴ Idem fere sentiunt Sennius Capito et Cincius.

The etymology of left-hand omen as *id quod sinat fieri* is an attempt to account for the favorable meaning of *sinister*. The opening words of the quotation from Varro are important mainly because they have been most amusingly misunderstood and made the main basis for a theory that the Etruscan and Roman gods had an Olympus in the north. I expect to refute this in a special paper, and will merely say here that the passage describes nothing but the *spectio* or taking of the auspices in the *auguraculum* or consecrated area, and that the *sedes deorum* simply means the place where the seated magistrate performs the ceremony.

¹ Festus (p. 220 ap. Paulum), s. v. *Posticum*: Ea caeli pars quae sole illustratur ad meridiem antica nominatur, quae ad septentrionem postica; rursumque dividuntur in duas partes, orientem et occidentem. Cf. Cicero, *De div.* I, 22, 45: Ea caeli pars quae sole illustratur ad meridiem antica nominatur, quae ad septentrionem postica.

² Cicero states the lucky left as the augural law in *Fam.* VI, 6, 7: *Non igitur ex alitis involatu nec e cantu sinistro oscinis, ut in nostra disciplina est, auguror.* The appointment of a dictator is confirmed by a left-hand bird omen: *Leg.* III 3, 9: *Isque ave sinistra [dictator] dictus, populi magister esto.* In *Div.* IV 47, he quotes a poem in which thunder on the left was a lucky omen. Cf. *Div.* II, 35, 74.

³ *De Div.* I, 17, 31: Multis annis post Romulum Prisco regnante Tarquinio quis veterum scriptorum non loquitur quae sit ab Atto Navio per lituum regionum [*i.e.* urbis Romae] facta descriptio? Qui cum propter paupertatem sues puer pasceret, una ex iis amissa vovisse dicitur, si recuperasset, uvam se deo daturum, quae maxima esset in vinea; itaque suae inventa ad meridiem spectans in vinea media dicitur constitisse, cumque in quattuor partis vineam divisisset trisque partis aves abdixissent, quarta parte, quae erat reliqua, in regiones distributa miracula magnitudine uvam, ut scriptum videmus, invenit.

discussion of the inconsistent and contradictory schemes of divination to which I have already referred.¹ He puts in juxtaposition a passage from the early Roman poet Ennius, who speaks of left-hand thunder as fortunate, with one from Homer who, in *Il.* XII, 239, describes right-hand thunder as lucky, and in this connection speaks of the general fact that the two nations held opposite theories, the Romans believing in the lucky left while the Greeks and barbarians believed in the lucky right. To such an extent did the Romans associate *sinister* with luck that they called all lucky omens *sinister*, even when they happened on the person's right side. This extension of the meaning of *sinister* is referred to by Festus on the authority of Ateius Capito who says that a sinister omen means a happy and fortunate omen.²

Ennius can be quoted not only, as Cicero does, for lucky thunder and lightning:

Tum tonuit laevom bene tempestate serena (III, 459)

but also for lucky bird omens:

At Romulus pulcher in alto

Quaerit Aventino laevom genus altivolantum (Fr. 52, v. 78)

Et simul ex alto longe pulcherrima praepes

Laeva volavit avis, simul aurens exoritur Sol (Fr. 52, v. 89)

Of particular importance is the famous scene in Livy (I, 18) describing the sanctioning by the gods of the selection of Numa as king. The ceremony took place in the augural area on the top of

¹ *De Div.* II, 39: Quae autem est inter augures conveniens et coniuncta constantia? Ad nostri augurii consuetudinem dixit Ennius: Tum tonuit laevom bene tempestate serena (459). At Homericus Ajax apud Achillem etc. . . . Ita nobis sinistra videntur, Graiis et barbaris dextra meliora: quamvis haud ignoro quae bona sint sinistra nos dicere etiam si dextra sint; sed certe nostri sinistrum nominaverunt externique dextrum, quia plerumque id melius videbatur. Haec quanta dissensio est!

² Festus, p. 351: *Sinistrum in auspicando significare ait Ateius Capito laetum et prosperum auspicium.* It should be noted in this connection that Servius practically says the same in his note to Aen. II, 693: "*Sinistrum a sinendo dictum, quantum ad auguria pertinet, quod nos agere aliquid sinat.*" This explanatory etymology had already been given by Festus: see note 5 on p. 189. The attempt of Valetton to take away the orientation meaning of *sinister* in the course of evolution cannot be supported by any proof. Even as late a writer as Arnobius (300 A.D.) keeps up the connection of *sinister* and *laevus* (left) in referring to the gods presiding over divination by thunder and lightning in the sixteen divisions of the heavens, eight on the left and eight on the right: *diî laevi et laevae, sinistrarum regionum praesides et inimici partium dexterarum* (scil. caeli).

the Capitol hill, and either Livy has confused in his narrative two ceremonies,—the seeking of celestial signs and the laying out of a city site,—or else an interpolator has done this for him.¹ Perhaps both explanations are correct. This has resulted in what seems a double orientation: one toward the south for Numa, sitting on the augural bench, and one toward the east for the augur when he marks out the *templum*. But, for any one familiar with the fact that only the magistrate,—in this case Numa,—could direct the auspices, and that the augur could only observe and report, it is evident that the orientation of this ceremony was to the south, because both Livy and Plutarch (*Numa* 7) agree in stating that Numa sat facing south. When Livy describes how the augur marked out the heavenly *templum* we see that he is ignorant of the distinction between the earthly and the heavenly, because instead of the heavenly *templum* with its two intersecting lines forming four sections, we have the description of an earthly *templum* such as Varro gives. Of this part of the text I shall give an entirely new interpretation in connection with the Varronian description.

The elder Pliny (II, 142) makes an important statement which not only supports the southern orientation of the celestial *templum* but asserts that in fulgural divination, in which the Romans depended on the Etruscans, the four original divisions of the heaven were subdivided each into four parts, giving sixteen sections, radiating from the centre, within which the phenomena of thunder and lightning were observed. As was the case with Varro he also explains the belief in the lucky left by this southern orientation:—*Laeva prospera existumantur quoniam laeva parte mundi ortus est. . . . In sexdecim partes caelum in eo spectu divisere Tusci. Prima est a septentrionibus ad aequinoctialem exortum, secunda ad meridiem, tertia ad aequinoctialem occasum, quarta optinet quod reliquom est ab occasu ad septentriones. Has iterum in quaternas divisere partes, ex quibus octo ab exortu sinistras, totidem e contrario appellavere dextras. Ex his maxime*

¹ Liv. I, 18: Accitus, sicut Romulus augurato urbe condenda regnum adeptus est, de se quoque deos consuli iussit; inde ab augure. . . . deductus in arcem in lapide ad meridiem versus consedit. Augur ad laevam eius capite velato sedem cepit, dextra manu baculum sine nodo aduncum tenens, quem lituum appellarunt. Inde ubi, prospectu in urbem agrosque capto, deos precatus regiones ab oriente ad occasum determinavit (dextras ad meridiem partes, laevas ad septentrionem esse dixit), signum contra, quoad longissime conspectum oculi ferebant, animo finivit.

dirae quae septentrionem ab occasu attingunt . . . optimum est in exortivas redire partes. Idem cum a prima caeli parte venerunt et in eandem concesserunt, summa felicitas partenditur, etc.

A similar statement had already been made in brief by Cicero (*Div. II, 42*):—*Caelum in sedecim partis dividerunt Etrusci. Facile id quidem fuit quattuor, quas nos habemus duplicare, post idem iterum facere, ut ex eo dicerent, fulmen qua ex parte venisset.* Servius, also, says (*ad Aen. VIII, 427*):—*dicunt physici de sedecim partibus caeli iaci fulmina.*

The ideas connected with this subdivision of the heavens into sixteen compartments and the gods that governed their omens were elaborated in the curious encyclopaedic work of Martianus Capella, a very late writer (V cent. A.D.) who is thought, however, to have cribbed his material from Varro, or Nigidius Figulus, or even from Latin translations of Etruscan works on divination. He gives a chart of the heavens for purposes of divination by thunder and lightning, beginning at the north pole and working from left to right. He pigeon-holes gods and genii in each compartment. What is important for this question is that the chart is based on southern orientation. The four northeast sections are *sinistra postica*; the four southeast are *sinistra antica*; the four southwest are *dextra antica*, and the four northwest are *dextra postica*. The sixteen are grouped in two sections, on the basis of this orientation, and their gods are in two opposite camps, the camp of the left, which is favorable and the camp of the right which is inimical. The feud between the two groups of eight is alluded to by another late writer, Arnobius (*Adv. gentes IV, 5*) who speaks of the *dii laevi et laevae, sinistrarum regionum praesides et inimici partium dexterarum*.

The fact of southern orientation for the heavenly *templum* and the lucky left, and their interdependence being thus solidly established for both Etruria and Rome, a few texts must be discussed which seem to disagree with this view and to give some ground for inquiring whether there was not a school that followed an eastern orientation for the heavenly *templum*.

In the hodge-podge of that early medieval writer, Isidore of Seville (*Orig. XV, 4, 7*) there is a brief description of a *templum* based on eastern orientation: *Locus designatus ad orientem a contemplatione templum dicebatur, cuius partes quatuor erant antica ad ortum, postica ad occasum, sinistra ad septentrionem, dextra ad meridiem spectans. Unde et quando templum construebant, orien-*

tem spectabant aequinoctialem. It is uncertain from what Roman source Isidore drew this statement, which would be correct if it referred to the earthly *templum*.

Servius also infers an eastern *templum* in the sentence (*ad Aen.* II, 693):—*Sinistras autem partes septentrionales esse augurum disciplina consentit, et ideo ex ipsa parte significantiora esse fulmina quoniam altiora et viciniora domicilio Iovis.* Here Jove's northern thunders are described as the more to be noted because there the earth is so much higher and nearer to Jove's domain in the heaven. We know positively from Pliny, Martianus Cappella, and our other sources that for divination by thunder the orientation was *not* to the east.

In Dionysius of Halicarnassus (II, 5, 2) the eastern orientation is posited for augural ceremonies: *καθέδρα μὲν καὶ στάσις ἀρίστη τῶν οἰωνοῖς μαντευομένων ἢ βλέπουσα πρὸς ἀνατολάς*, and we must not be too severe with him for his explanation, based on Greek and not Roman ideas.¹ We find the same twist in Plutarch's Roman Questions (*Q. R.* 78), where he answers the query: "What is the reason that a bird called *sinister* in sooth-saying is fortunate?"² He suggests King Juba's³ explanation that "to those who look toward the east the north is on the left hand, which some make the right side and upper part of the world." He also says: "Or is it that they think that things terrestrial and mortal stand directly over against heavenly and divine things, and conjecture that the things which to us are on the left hand the gods send down from their right hand." Here again we see the Greek mind struggling against acknowledging the possibility that anything could be lucky because it was on the left.

These few passages merely show two sources of confusion: that due to Greek infiltration, and that due to late inability to follow old traditions.

Terrestrial and aerial Temples.—What was the shape and what the orientation of the terrestrial *templum*? Varro says, as we have seen (p. 189), that this *templum* was limited and bounded

¹ Dionysius explains the preference given to the omens of birds on the left hand by the fact that to a person facing the east the left hand is the north which is a more honorable part of the world than the south. This is, of course, a Greek concept, quite the opposite to Roman and Etruscan ideas.

² Διὰ τί τῶν οἰωνῶν ὁ καλούμενος ἀρίστερος αἰσιος.

³ Τὸ βόρειον δὲ δὴ τοῦ κόσμου δεξιὸν ἐνιοὶ τίθενται καὶ καθυπέρτερον.

by augury.¹ There could be a *templum* within a *templum*. The whole of a city, such as Rome, was a *templum*; each temple area was a *templum*; the rostra, some basilicas, the curia, were all *templa*. I have shown or stated elsewhere that for this class of *templa* almost any form could be used, and that they can be roughly classified under circles, triangles, and rectangles.

I have written in a previous article in the JOURNAL (XVIII, 1914, pp. 302 ff.) on the circular *templum* and somewhat briefly elsewhere (A. J. Philol. XXXVI, 1915, pp. 314 ff.) of the triangular *templum*. The first thing to be noted in Varro's text is that the boundaries of the *templum* are determined by large trees, denoting an early date for the document or formula cited, the language of which also is archaic and technical. The boundaries are determined not merely by sight (*conspicione*) but by memory or mental vision (*cortumione*). But most important is the fact that a careful reading of Varro's text will show that the *templum* he describes is not, as always supposed, rectangular but triangular. He first fixes a point on his left, marked by a certain tree which is described: he then marks out a corresponding point on his right. Between these points he determines the boundaries in front of him by sight and memory. My suggestion is that the base line of the triangle runs from left to right through the place where the augur stands and that the apex of the triangle is directly in front of him. This interpretation is, I think, confirmed in a most unexpected manner by the description in Livy of the inauguration of Numa which has already been discussed (p. 192). If we leave out the evident gloss in parenthesis it reads: *inde ubi prospectu in urbem agrosque capto, deos precatus regiones ab oriente ad occasum determinavit, signum contra, quoad longissime conspectum oculi ferebant, animo finivit*. The augur's glance is first directed over city and fields, showing that it is the earthly *templum* that is in question. He then marks out the regions by drawing a line from east to west which forms the base of the triangle, and then marks out the limit immediately in front of him as far as his eye could reach into the distance; this being the

¹ L. L. VII, 8: In terris dictum templum locus augurii aut auspicii causa quibusdam conceptis verbis finitus. Concipitur verbis non hisdem usque quaque. In arce sic; templa tescaque me ita sunt quoad ego caste lingua nuncupavero. Olla veter arbos, quirquir est, quam me sentio dixisse, templum tescumque finito in sinistrum. Olla veter arbos, quirquir est, quam me sentio dixisse, templum tescumque finito in dextrum. Inter ea conregione conspicio cortumione utique ea rectissime sensi.

apex of the triangle. The augur, in going through this ceremony is not, therefore, obliged to turn around. He keeps seated, facing the south, or the east or the west as the case may be.

It seems curious that when a passage has been submitted to such microscopic examination by so many scholars it should not have occurred to any critic that the form of this *templum* is so clearly triangular that no other explanation is possible. How else can the *signum contra* be explained, between east and west? And as the *signum contra* is actually between east and west it must be that the augur did *not* face east, as he is always said to face, and if not east, then of course south, as Livy says in the preceding sentence that he faced, when he sat down by Numa on the augural seat, the *sedes deorum*.

In a previous paper¹ I discussed another triangular *templum*, that of the *arx* of Iguvium. I there showed that this *templum*, which had hitherto been thought to follow the supposed inevitable rectangular form, is described with great particularity as a triangle whose apex is at the augural seat on the *arx* with a base line running in front of the augur from left to right, from the main altar (left) of the gods to the border line of the *urbs* (right).

According to circumstances, therefore, the augur stood either in the centre of the base line or at the apex of the *templum* triangle.

As for the system of orientation of the earthly *templum*, it was twofold, eastern and western. A large part of our information as to the philosophy back of this form of *templum* is to be found in that mine of technical lore, the handbooks of the Roman civil engineers, called *agrimensores* or *gromatici*, written mainly under the Middle Empire. They give the rules and practise of Roman surveying, which marched hand in hand with the Roman legions across the world. A careful collation of their introductory statements would seem to show: (1) That Roman surveying was based on Etruscan teaching; (2) that the original Etruscan orientation was toward the west and was at first followed quite generally in Roman practice; (3) that, after a time, perhaps owing to a recurrence to antique Latin tradition and to a change in religious ideas, the eastern was substituted for the western orientation.

There was never entirely shaken off a certain subservience of the earthly to the heavenly *templum*, as shown in the surveyor's texts and even in some inscriptions. Lachmann in his notes to Siculus

¹ 'Grabovius—Gradivus. Plan and Pomerium of Iguvium.' *A. J. Philol.* XXXVI, 1915, p. 314.

Flaccus (p. 155) speaks of the inscriptions referring to the assigning of land in colonies, *in agris divisus et assignatis*, and calls attention to the expression: *dextra et sinistra decumanum totum, ultra citra cardinem totum*. The surveyor here is supposed to speak of the *decumanus* line as running the whole length from right to left, and the *cardo* line from front to back. This implies, of course, the southern orientation and also implies that the *decumanus* line was marked as beginning not at the east but at the west end.

One of the best evidences of the existence of the two *templa* is the difference in the way the four quarters of each *templum* are marked out. In the heavenly *templum* the line from south to north is drawn first and that from east to west afterward. In the earthly *templum* it is the east-west line that comes first, and it is this line that must remain intact, not broken when it is intersected by the later drawn south-north line. The east-west line was called *decumanus* and the south-north line *cardo*.

In regard to the relative importance of the two lines, the opinion expressed by Schulten in Pauly-Wissowa (s. v.) is that the *cardo* and not the *decumanus* was originally the principal line. This was also the opinion of Mommsen¹ and Nissen in his *Orientalion*.² With due respect for these writers it seems evident that the *cardo* line is the more important in the heavenly *templum* and the *decumanus* in the earthly *templum*, depending, of course, on the different orientations.

The principal Roman surveyors' manuals are prefaced by a sort of philosophic statement of the principles on which their practise is based, and from these prefaces I shall quote what is important for orientation.

Festus, for instance, who has been quoted for the southern orientation of the heavenly *templum*, is equally positive in affirming an eastern-western orientation for the earthly *templum* of the surveyors. He says (p. 234): *Prorsi limites appellantur in agrorum mensura qui directi sunt ad orientem*. He repeats this assertion in another form (p. 233): *Posticam lineam in agris dividendis Servius Sulpicius appellavit ab exoriente sole ad occidentem quae spectat*.

¹ *Hermes*, XXVII, 90.

² Schulten makes *antica*=*citrata*=eastern and *postica*=*ultrata*=western, exactly reversing the real relation, because *citra* is behind and *ultra* is in front of a given point or line.

This western orientation is asserted to be the original orientation in surveying the earth by the most prominent of the Roman writers of special treatises on the subject of surveying. They take pains to state clearly the theory of orientation which they follow.

I first cite Frontinus (p. 27): *Limitum prima origo, sicut Varro descripsit, a disciplina Etrusca; quod aruspices orbem terrarum in duas partes dividerunt, dextram appellaverunt quae septentrioni subiaceret, sinistram quae ad meridianum terrae esset, ab oriente ad occasum, quod eo sol et luna spectarent, sicut quidem architecti delubra in occidentem recte spectare scripserunt.*

Here is the earthly *templum* based on a western orientation. This statement is immediately followed by: *Aruspices altera linea ad septentrionem a meridiano dividerunt terram, et a media ultra antica, citra postica nominaverunt.*

Evidently this second paragraph describes the marking of the *cardo* line, just as the first had described the *decumanus* line. The second part of the sentence shows a southern orientation, because, taking as point of departure the centre of the south-north line, it says that the half of it that was in front was called *ultra* and the half that was behind *citra*. This is confirmed by the following sentence, in which Frontinus explains how these two stages in Etruscan world surveying were used as a basis by the Roman surveyors: *Ab hoc fundamento maiores nostri in agrorum mensura videntur constituisse rationem. Primo duo limites duxerunt; unum ab oriente in occasum quem vocaverunt decimanum; alteram a meridiano ad septentrionem, quem vocaverunt cardinem, decimanus autem dividebat agrum dextra et sinistra, cardo citra et ultra.*

Hyginus, another prominent *agrimensor*, fortunately explains the shifting from the earlier Etruscan western orientation to the later Roman eastern orientation, which he connects, it would seem, with the change in the way temples were made (p. 166): *Inter omnes mensurarum ritus eminentissima traditur limitum constitutio. Est enim illi origo caelestis et perpetua continuatio. Constituti enim limites non sine mundi ratione, quoniam decumani secundum solis decursum diriguntur, kardines a poli axe. Unde primum haec ratio mensurae constituta ab Etruscorum aruspicum disciplina; quod illi orbem terrarum in duas partes secundum solis cursum dividerunt, dextram appellaverunt quae septentrioni subiacebat, sinistram quae ad meridianum spectaret; alteram lineam*

duxerunt a meridiano in septentrionem, et a media ultra antica, citra postica nominaverunt. Ex quo haec constitutio limitibus templorum adscribitur. Ab hoc exemplo antiqui mensuras agrorum normalibus longitudinibus incluserunt, primum duos limites constituerunt, unum, qui ab oriente in occidentem dirigeret, hunc appellaverunt duodecimenum . . . alterum a meridiano ad septentrionem, quem kardinem nominaverunt a mundi kardine . . . reliquos limites fecerunt angustiores, et qui spectabant in orientem prorsos, qui ad meridianum transversos appellaverunt.

After stating in this passage that the Etruscans faced to the west, but the "antiqui," evidently Romans, faced eastward and called the lots to the east of the centre the front lots, Hyginus (p. 169) tries to explain this contradictory practise by the change in religious custom from the earlier one of facing temples westward to the more recent one of facing them eastward: *Secundum antiquam consuetudinem limites diriguntur, quare non omnis agrorum mensura in orientem potius quam in occidentem spectat, in orientem sicut aedes sacrae. Nam antiqui architecti in occidentem templa recte spectare scripserunt: postea placuit omnem religionem eo convertere, ex qua parte caeli terra inluminatur. Sic et limites in oriente constituuntur.*

It is supposed that in saying that ancient architects described temples as facing west Hyginus was referring among others to Vitruvius, who says (IV, 5) that those who sacrificed at the altars faced the east and also faced the statues of the gods in the temples, because all altars were made to face the east. Of course the basis for this is an eastern orientation for prayer.

This change from the western to the eastern orientation took place long before the close of the republic, and seems to have been associated with the increased strength of solar cults. It would be idle to speculate at length on the reason for the change. I would merely suggest a possible cause in the altered attitude of the Romans toward the chthonic gods. In early times the major part of Roman worship was concerned with the earth gods. The cults of Terra Mater; of Vediovis, the volcanic subterranean god; of Janus and Vesta, the spirits immanent in the entrance and the hearth of the dwelling-place; of Mars, the spirit of the fruitful field; and of such minor deities as Robigus of the mildew, Consus and Ops of the corn store, of Portunus, Pomona, Flora, and many more, all show that, for weal or woe, the Romans turned their thoughts earthward. Their gods were earth-gods

localized on some part of the earth's surface and representing both the life-giving and destroying powers of nature. Only Jupiter was a sky god. Therefore, the gifts from the gods were not connected, as in the Orient, with an easterly position, toward the sun as giver of life, nor, conversely, was there that association of the west with death that was the corollary in Greece as well as in the East. But, coincident, perhaps, with the popularizing from Greece of the cult of Dis and Persephone, lords of the underworld, and with the transfer of the gods from the earth to the sky, it seems logical to suppose that the Romans began to follow the cult direction of the rest of the world. This took place at some time before the Punic wars.

The legend of the famous Etruscan diviner, Olenus Calenus, as related by Dionysius (IV, 69-71) also shows the eastern orientation in the laying out of the city of Rome, and, in general, in the orientation of the terrestrial *templum*, because when the diviner traces on the ground the image of the *templum* of Rome with a circular outline which two lines at right angles bisect into four equal parts, he starts tracing these lines at the east end toward which he faces.¹ This is a hitherto unnoted fact, I believe.

Coincident with the shifting from west to east in Roman orientation it is likely that the western orientation was reserved for ceremonies relating to the dead (as in Greece) and to the gods of the underworld. We know, for example, that the sacrifices to Dis and Persephone took place at the *Tarentum*, in the Campus Martius, outside of the *pomoerium*, and that the *Tarentum*, with its underground altar, was on the right hand and on the west side of the magistrate presiding at an augural function on the *arx* of the Capitol.

It remains to say a few words on two points. The first is in regard to the lucky left, *per se*, as distinct from orientation. It is evident that the idea of luck passed at a very early date from association with points of the compass to association with the sides of the human body, even when they were not in a ritual position. That occurs with all races. It is interesting to note that with the early Romans, as shown in the archaic tombs in the Forum, as well as in Italic and Etruscan burials, the association passed into dress. The attaching of the mantle on the left shoulder, which is the rule, is certainly symbolic and contrasts with the opposite Greek custom.

¹See my paper on the circular *templum* in A. J. A. XVIII, 1914, p. 312.

The second point is that of the gradual change in Roman custom through Greek influence, until the lucky left remained a belief only in the sphere of religious tradition and divination ceremonial. This change filtered down to the people from the cultured and literary *élite*. It got so complete a control over literature under the empire that in a recent doctor's dissertation an excellent case is made out for the lucky right as the Roman rule.¹ However, I expect in another paper to show how works of art present quite another aspect. Art was almost always more conservative and more national than literature. From the temple of Jupiter Capitolinus where Juno occupies the place of honor on the left hand of Jupiter, and Minerva the less honorable place on his right,—a fact consecrated in the cult statues of the gods reproduced on many coins,—to the war panoramas on the columns of Trajan and Marcus Aurelius, there is the consistent use of the honorable left. More extraordinary yet, the tradition survived in the Christian art of Rome almost to the end of the Middle Ages. We can distinguish a Latin from a Byzantine mosaic or fresco by noting that Peter is given the place of honor on the *left* side of Christ, whereas a Byzantine artist places him on the right. This Roman custom lasted until the time of the great Cavallini, master of Giotto.²

I have always been tempted to attribute to this tenacious persistence of old traditions among the people the peculiar Roman custom of driving to the left instead of to the right through the streets of Rome—a custom undoubtedly connected with luck.

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¹ A. P. Wagener, *Popular Associations of Right and Left in Roman Literature* (Dissert., Johns Hopkins Univ., 1910–1912).

² See my paper read before the last International Congress of the History of Art in Rome (1913): *Di un metodo per distinguere opere Bizantine dalle Italo-Bizantine*.